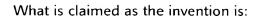
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- 1. A method for comparing two electrical signals, said method comprising the steps of:
- (a) comparing the signals to each other and to at least one threshold to produce samples representative of the signals;
 - (b) converting a plurality of samples into a first count; and
 - (c) comparing the count to at least one threshold.
- 2. The method as set forth in claim 1 wherein comparing step (a) includes the steps of:

comparing the signals in an analog comparator;

sampling the output of the comparator to produce a binary representation of the comparison.

3. The method as set forth in claim 1 wherein comparing step (c) includes the step of (d) providing a binary indication of the results of the comparison.

4. The method as set forth in claim \(\frac{1}{3} \) and further including the step of:

(e) controlling a first accumulator and a second accumulator with said binary indication:

wherein the first accumulator counts consecutive binary indications of the same value: and

the second accumulator increments of decrements in accordance with the binary indication.

- 5. The method as set forth in claim 4 and further including the step of:
- (f) logically comparing the counts in the accumulators to produce a binary signal.
- 6. The method as set forth in claim 5 wherein step (f) includes the steps of: comparing the count in the first accumulator to a threshold and producing a first single bit representation of the comparison;

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comparing the count in the second accumulator to a threshold and producing a second single bit representation of the comparison;

logically combining the first bit representation with the second bit representation.

- 7. In an accumulator including an up-down counter and logic for preventing roll-over, the improvement comprising:
- a first boundary for roll-over, wherein said boundary is less than the capacity of said up-down counter; and
- a first multiplexer coupled to said logic for preventing roll-over for supplying a first predetermined count to said up-down counter when the count in said counter is incremented past said first boundary.
 - 8. The accumulator as set forth in claim 7, wherein said accumulator includes logic for preventing roll-under, said improvement further comprising:
 - a second boundary for roll-under, wherein said boundary is greater than the minimum count of said up-down counter; and
 - a second multiplexer coupled to said logic for preventing roll-under for supplying a second predetermined count to said up-down counter when said counter is decremented past said second boundary.